



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

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| Applicant's or agent's file reference ACM 3029 P1-WO | FOR FURTHER ACTION See Form PCT/PEA/416 | |
| International application No. PCT/EP2004/014737 | International filing date (day/month/year) 21.12.2004 | Priority date (day/month/year) 22.12.2003 |
| International Patent Classification (IPC) or national classification and IPC INV. D21H17/26 D21H19/24 D21H19/52 D21H21/10 D21H17/37 D21H19/56 | | |
| Applicant AKZO NOBEL N.V. et al. | | |
| <p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p> | | |
| <p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p> | | |
| Date of submission of the demand 21.10.2005 | Date of completion of this report 28.04.2006 | |
| Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 | Authorized officer Naeslund, P Telephone No. +49 89 2399-8614  | |

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.

PCT/EP2004/014737

107584005

107584005
IN SUPPLEMENTAL BOX 22 JUN 2006

Box No. I Basis of the report

1. With regard to the **language**, this report is based on

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3(a) and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4(a))
 - ☐ international preliminary examination (under Rules 55.2(a) and/or 55.3(a))

2. With regard to the **elements*** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

Description, Pages

1-11 as originally filed

Claims, Numbers

1-5 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2004/014737

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | |
|-------------------------------|-------------|------|
| Novelty (N) | Yes: Claims | 1-5 |
| | No: Claims | NONE |
| Inventive step (IS) | Yes: Claims | NONE |
| | No: Claims | 1-5 |
| Industrial applicability (IA) | Yes: Claims | 1-5 |
| | No: Claims | NONE |

2. Citations and explanations (Rule 70.7):

see separate sheet

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

PCT/EP2004/00087
AP20 Rec'd PCT/PTO 22 JUN 2006

Re Item V.

0. The following documents are referred to in this communication:

D1: EP-A-0 310 787

D2: GB-A-2 219 587

D3: GB-A-1 474 551

1. INDEPENDENT CLAIMS 1 AND 5

- 1.1 Document D1 (see page 2, line 1,2, lines 20-24; abstract) discloses a paper comprising cellulose ether wherein the cellulose ether comprises a quaternary ammonium group (NB: The ether is inherently present in the product when it has been added in the manufacturing process of the product).

The subject-matter of claim 1 differs in that it comprises a filler.

It is however a common measure by the skilled person to add filler in the production of paper. See e.g. D3 ("kaolin", example 10), the disclosure of which addresses the same problem as the present application, namely retention. The subject-matter of claim 1 therefore lacks an inventive step.

The same reasoning is valid in view of D2 (see claims 1 and 15) and D3 (see page 1, lines 8-35). The subject-matter of claim 1 therefore lacks an inventive step also in view of these disclosures; Art. 33(3) PCT.

With regard to the provision of claim 1, of not including a cellulose ether which is a hydroxy ethyl cellulose, it provides a disclaimer over document D3, however, any particular effects related therewith are not discernible from the examples of the present application and it therefore can not contribute to any inventive step.

- 1.2 Additionally, as to claim 5 the subject-matter of this claim is considered to lack an inventive step in view of the fact that additives useful as binders, aggregating

agents, thickeners etc. which are added for obtaining size, retention etc. can, as is generally known in the field, either be added to the stock or to the formed paper in the form of a coating. The skilled person thus arrives also at claim 5 subject-matter without having to apply any inventive skills; Art. 33(3) PCT.

2. DEPENDENT CLAIMS 2-4

The subject-matter of dependent claims 2-4: in view of the cited art and the general knowledge in the field the additional features are not considered novel (implicit disclosure) alternatively not inventive (no particular effects can be seen-DS would result from a pure routine optimization); Art. 33(3) PCT.

3. For the assessment of the present claims on the question whether they are industrially applicable, no particular reasoning would appear necessary to give. The industrial application would appear to be evident (Art. 33(4) PCT).